ABSTRACT

The device includes: a write-gray scale level determining means (2), (3) for determining the write-gray scale level data for input image data that compensates the optical response characteristic of a liquid crystal display panel (4), in accordance with, at least, the combination of the gray scale level transitions from a previous vertical period to a current vertical display period; and an achievable gray scale level determining means (5), (6) for generating the achievable gray scale level data for input image data after a lapse of one vertical display period of the liquid crystal display panel, in accordance with, at least, the combination of the gray scale level transitions from one vertical display period to the next. The write-gray scale level determining means (2), (3) determines the write-gray scale level data to be supplied to the liquid crystal display panel (4), based on the achievable gray scale level data of the liquid crystal display panel (4), corresponding to the input image data at the previous vertical display period, output from the achievable gray scale level determining means (5), (6) and the input image data at the current vertical display period. In this way, it is possible to correctly inhibit generation of afterimages and present correct display of half gray scales even for motion pictures containing any kind of gray scale level transition,

by implementing overshoot drive of the liquid crystal display panel using actual achievable gray scale levels within the one vertical display period, even if any type of gray scale level transition occurs from one vertical display period to the next.